DRAFT

15 Day Language

The following is the proposed wording for the amended Appliance Regulation provisions related to central air conditioners and water heaters.

1. Change 1604(c)(4) as follows:

~~(4) The seasonal energy efficiency ratio of all new central air conditioners that are consumer products and that are manufactured on or after the dates shown in Table C-8, and the heating seasonal performance factor of all new central air-conditioning heat pumps that are consumer products and that are manufactured on or after the dates shown in Table C-8 are required by federal law to be not less than the values shown (10 Code of Federal Regulations Section 430.32(c) (1991)).~~

~~Table C-8~~

Effective Date	*Type*	*Seasonal Energy Efficiency Ratio*	*Heating Seasonal Performance Factor*
January 1, 1992	Split system	10.0	6.8
January 1, 1993	Single package	9.7	6.6

~~These appliances are defined in federal regulations (10 Code of Federal Regulations Section 430.2 (1991)) as follows:~~

~~"'Central air conditioner' means a product, other than a packaged terminal air conditioner, which is powered by single phase electric current, air cooled, rated below 65,000 Btu per hour, not contained within the same cabinet as a furnace, the rated capacity of which is above 225,000 Btu per hour, and is a heat pump or a cooling unit only. "~~

(4) Energy Efficiency Standards for Air-Cooled Air Conditioners and Air Source Heat Pumps.

(i) The EER, SEER, HSPF, and COP of air-cooled air conditioners and air source heat pumps manufactured on or after a date three years after the date the U.S. Department of Energy grants a waiver from federal preemption for such standards, shall be not less than the applicable values shown in Table C-8.

(ii) The EER of air-cooled air conditioners and heat pumps that have a cooling capacity less than 65,000 Btu/hr and that are manufactured on or after January 1, 2006, shall not be less than 11.6.

(iii) Any appliance of a type and cooling capacity covered by Table C-8 shall have a device that results in an $EER_{95^{o}}$ that is within 95 percent of the rated $EER_{95^{o}}$ at all of the following conditions:

- Refrigerant charge at 90 percent of the refrigerant charge specified by the manufacturer of the appliance
- Refrigerant charge at 120 percent of the refrigerant charge specified by the manufacturer of the appliance
- Airflow at 80 percent of the airflow specified by the manufacturer of the appliance

A thermal expansion valve is such a device.

Table C-8
Standards for Air-Cooled Air Conditioners and Air Source Heat Pumps

Appliance	*Cooling Capacity (Btu/hr)*	*Minimum Standard*
Air cooled air conditioners	< 65,000	11.3 EER 13.0 SEER
Air source heat pumps	< 65,000	11.3 EER 13.0 SEER 7.9 HSPF
Air cooled air conditioners	‡ 65,000 and < 135,000	11.0 EER
Air source heat pumps	‡ 65,000 and < 135,000	11.0 EER 3.4 at 47¡F. COP 2.4 at 17¡F. COP
Air cooled air conditioners	‡ 135,000 and < 240,000	10.8 EER
Air source heat pumps	‡ 135,000 and < 240,000	10.8 EER 3.3 at 47¡F. COP 2.2 at 17¡F. COP

2. Change 1604(f)(4) as follows:

~~(4) The energy factor of all new water heaters that are Consumer products and that are manufactured on or after January 1, 1990 is required by federal law to be not less than the values shown in Table F-5. These appliances are defined in federal regulations (10 Code of Federal Regulations section 430.2 (1992)) as follows:~~

~~" 'Water heater' means a product which utilizes oil, gas, or electricity to heat potable water for use outside the heater upon demand, including:~~

~~(a) Storage type units which heat and store water at a thermostatically controlled temperature, including gas storage water heaters with an input of 75,000 Btu per hour or less, oil storage water heaters with an input of 105,000 Btu per hour or less, and electric storage water heaters with an input of 12 kilowatts or less;~~

~~(b) Instantaneous type units which heat water but contain no more than one gallon of water per 4,000 Btu per hour of input, including gas instantaneous water heaters with an input of 200,000 Btu per hour or less, oil instantaneous water heaters with an input of 210,000 Btu per hour or less, and electric instantaneous water heaters with an input of 12 kilowatts or less; and~~

~~(c) Heat pump type units, with a maximum current rating of 24 amperes at a voltage no greater than 250 volts, which are products designed to transfer thermal energy from one temperature level to a higher temperature level for the purpose of heating water, including all ancillary equipment such as fans, storage tanks, pumps, or controls necessary for the device to perform its function."~~

~~Table F-5~~

Water Heater Type	*Energy Factor Through April 14, 1991*	*Energy Factor effective April 15, 1991*
Gas	0.62 - (.0019 x V)	0.62 - (.0019 X V)
Electric (including heat pump)	0.95 - (.00132 x V)	0.93 - (.00132 X V)
Oil	0.59 - (.0019 x V)	0.59 - (.0019 X V)

Where V = Rated volume in gallons

(4) Energy Efficiency Standards for Small Water Heaters.

The energy factor for small water heaters manufactured on or after a date three years after the date the U.S. Department of Energy grants a waiver from federal preemption for such standards, shall be not less than the applicable values shown in Table F-5.

Table F-5

Standards for Small Water Heaters

Appliance	Minimum Energy Factor
Electric (including heat pump)	0.97 - (.00132 x V)
Gas	0.685 - (.0019 x V)
Oil	0.59 - (.0019 x V)

V = storage volume in gallons.